

28. The method of claim 25, wherein the haloperoxidase is a chloride peroxidase or a bromide peroxidase.

29. The method of claim 25, wherein the source of hydrogen peroxide is hydrogen peroxide, a hydrogen peroxide precursor, a hydrogen peroxide generating enzyme system, or a peroxycarboxylic acid or a salt thereof.

30. The method of claim 25, wherein the halide source is a halide salt.

31. The method of claim 30, wherein the halide source is sodium chloride, potassium chloride, sodium bromide, potassium bromide, sodium iodide, or potassium iodide.

32. The method of claim 25 wherein the ammonium source is an ammonium salt.

33. The method of claim 32, wherein the ammonium source is diammonium sulphate, ammonium chloride, ammonium bromide, or ammonium iodide.

34. The method of claim 25, wherein the ammonium source is an aminoalcohol.

35. The method of claim 25, wherein the ammonium source is ethanolamine.

35. The method of claim 25, wherein the halide source is sodium chloride and the ammonium source is diammonium sulphate.

36. The method of claim 25, wherein the halide source and the ammonium source are the same.

37. The method of claim 25, wherein said composition is an aqueous composition.

38. The method of claim 25, wherein the composition is a granulate.

39. An antimicrobial composition, comprising a haloperoxidase at a concentration in the range of 0.01-100 mM, a hydrogen peroxide source at a concentration in the range of 0.01-1000 mM, and an ammonium halide at a concentration in the range of 0.01-1000 mM.

40. The composition of claim 39, wherein the ammonium halide is ammonium chloride, ammonium bromide, or ammonium iodide.

41. The composition of claim 39, further comprising a halide source.

42. An antimicrobial composition, comprising a haloperoxidase at a concentration in the range of 0.01-100 mM, a hydrogen peroxide source at a concentration in the range of 0.01-1000 mM, a halide source at a concentration in the range of 0.01-1000 mM, and a C-1-14-alcoholamine at a concentration in the range of 0.01-1000 mM.

43. The composition of claim 42, wherein the alcoholamine is ethanolamine.

44. An antimicrobial composition comprising a haloperoxidase at a concentration in the range of 0.01-100 mM, a hydrogen peroxide source at a concentration in the range of 0.01-1000 mM, a halide source at a concentration in the range of 0.01-1000 mM, and diammonium sulphate at a concentration in the range of 0.01-1000 mM.

45. The composition of claim 44, wherein the halide source is sodium chloride.